CHANGING PATTERNS IN PHYSIOTHERAPY EDUCATION IN SOUTH AUSTRALIA[1]

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In 1969 arrangements were completed for transfer of the Diploma in Physiotherapy (offered by The University of Adelaide since 1945) to the South Australian Institute of Technology. This transfer was the result of recommendations by the Martin Committee in its report on Tertiary Education in Australia.

In February 1970 thirty-five physiotherapy students enrolled for the Diploma in Technology in Physiotherapy at the South Australian Institute of Technology; thus began a new era in which developments important to the profession are likely to occur fairly rapidly.

I would like to outline some of the current changes and possible developments in this paper with the hope that this will stimulate ideas and generate discussion which could be helpful to the education of physiotherapists in the future.

The S.A.I.T. is a large educational body which is unique in its close proximity to The University of Adelaide and its close academic association with that University. For some years the S.A.I.T. has offered courses leading to degree awards of The University of Adelaide, and many benefits have accrued from this intimate relationship. The S.A.I.T. is one of a number of tertiary institutions throughout Australia recently designated as Colleges of Advanced Education which are to play a very important part in the future provision of professionally trained personnel for industry, commerce, areas of social welfare and paramedical services.

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COLLEGES OF ADVANCED EDUCATION

In 1967 the Commonwealth Government provided funds for the establishment of Colleges of Advanced Education (C.A.E.) throughout Australia which were to be equal in stature but different from, Universities. The functions of the C.A.E. are summarized in the Australian Journal of Advanced Education Vol. 1, No. 2, 1970, p.4, as:

"(1) Aims

The Colleges were to provide professional level courses of a more practical and vocational kind than universities. They were to put less emphasis on highly theoretical and analytical studies than universities.

(2) Students

The aim was to attract students who were more interested in the application of knowledge than in verbal analysis or research. They were to be young people who planned to work after graduation rather than go on to higher studies. Graduates were to be young people able to apply their knowledge effectively soon after graduation and able to learn new skills in the future.

(3) Staff

The plan was to staff colleges with people who had good academic qualifications and who additionally had experience in industry. They were to be men and women who were more interested in teaching than in basic research, and they were to be people who would maintain close contact with industry."

The Commonwealth Advisory Committee has commented that:

"Just as university staff are expected to be the custodians of excellence in academic matters and the leaders in discovery, so must the college staff be encouraged to take the initiative in the application of knowledge. There is an overlap between the groups with neither having a monopoly in either sphere. We consider that the application of knowledge to specific problems, while it may call for different qualities of mind, is no less exacting. At present Australia is perhaps pressed more for leaders with industrial initiative than those dedicated to fundamental research." (First Report of the Commonwealth Advisory Committee on Advanced Education. June, 1966. Paragraphs 4.2, 4.3.)

Course Structure and Qualifications to be Offered

The Wiltshire Report (June, 1969) described a pattern of course structures and awards which, if implemented, will provide improvement in basic courses, further urgently needed avenues of higher education, and standardisation of nomenclature of qualifications in C.A.E. throughout Australia.

Problems for Physiotherapy

During the transition period from the University to the Institute our responsibilities as educators included a continued awareness of the problems which had existed in the profession for some years, *viz:*

(1) *Responsibility for our own field.*

Medical knowledge has become so wide and at the same time so specialized, that doctors have not time to acquire sufficient knowledge of physical methods of treatment and their application to disease and injury.

(2) *The need for a longer course.*

The existing course although heavily loaded was too short to cover the essential basic material in three years. The Board of Studies in Physiotherapy of The University of Adelaide had recognized the need for a longer course and in 1965 had unanimously supported a proposal for a four year course. This proposal was submitted to the Education Committee which indicated that it was not opposed to a four year course, but that such a course would have to be negotiated with the educational body which assumed responsibility for physiotherapy in 1970.

(3) *Nature of the course.*

We believed that the academic level and content of the physiotherapy course warranted a degree but were convinced that such a degree should be structured throughout for the requirements of physiotherapy. It must be recognized that the science of physiotherapy merits a degree in its own right.

(4) *Lack of avenues for educational and professional advancement.*

There is difficulty in obtaining scholarships, research grants, and recognized higher formal qualifications for those whose basic qualification is not a degree. Staff recruitment and promotion also present problems.

The Martin Committee noted these difficulties and the Wiltshire Report has stressed that one of the roles of colleges is to produce specialists in the application of knowledge, and to achieve this end the colleges must have staff of high calibre.

(5) *Dangers of overspecialization.*

Fragmentation by overspecialization in the medical sphere may cause disintegration of the whole.

(6) *Shortage of physiotherapists.*

The acute shortage of professional personnel is well known, world wide, and exists in basic grades and particularly in senior posts; this shortage is responsible for heavy work loads.

Diploma in Technology in Physiotherapy

The S.A.I.T. was unable to provide the four year course recommended by the Board of Studies in Physiotherapy but we noted that

certain other courses appeared to be moving towards longer courses because of increased professional demands.

During negotiations for transfer of the course certain changes were made, designed to provide students with time to read, study and think about what is being taught as is expected at this level of tertiary education within the Institute. We were grateful for the expert guidance given in this regard by the Assistant Director (Academic) of the Institute. The weekly contact load on the student was reduced to a more realistic level by re-arrangement of teaching in the second and third years, and by an additional twelve week period of clinical tutorials and clinical practice supervised by teaching staff, after the final examinations. This twelve week period is an integral part of the course which is now three years and three months in duration.

As a result of the changes made the course was accepted into the group of Diploma in Technology courses which are top level courses offered by the S.A.I.T.

THE FUTURE

It is not possible to predict all the developments that are likely to occur in the future but some topics will be considered in relation to the points listed previously.

(1) *Responsibility for our own field.*

Our future role and status will be partly related to the responsibilities we accept in our own field; therefore we must develop in the first post-graduate years.

It is hoped that the present impetus towards specialization of doctors will level out and that a different concept, likely at Flinders University Medical School, may create a better balance. If the present trend towards the production of Medical Scientist/Specialists does continue at the expense of General Practitioners, and if the G.P.'s remain overworked, who will listen to the patients' problems and fears, and extend that understanding so essential to the emotional problems of sick people? It is well known that many physical syndromes are caused or exacerbated by, emotional disturbance. The G.P.'s have supplied a great part of this understanding and support in the past; now it is virtually impossible for them to do so even though they may wish to and though they will attach importance to this function of medicine.

Human beings require human understanding especially in times of illness, and no miracles of medical technology will alter this indisputable, time proven, fact. Hospital patients tend to be lost as people in the intricacies of special tests. Who will spare a few minutes to explain things to them? Will this care be given by nurses? Does their training give them the understanding and background to do this? Have they time to do it?

Will it be forced more into the hands of ancillary personnel — clinical psychologists, clergy, mental health workers, trained hospital visitors, physiotherapists and others?

Does our training equip us sufficiently to do this? Should our course include lectures in clinical psychology, sociology, and lectures from hospital chaplains on such topics as the dignity of man, pain and suffering, death and the dying?

There seems little doubt that the incidence of strokes and other brain damage from vehicular accidents and drugs affecting the nervous system will increase; more day centres and domiciliary care services will develop necessitating the use of therapists who can both treat and direct treatment programmes, integrating physiotherapy treatment with other medical care.

What will be the effect on our profession if the present lack of balance in the prescribing of drugs continues? The dangers of large scale treatment of common ailments by chemotherapy are frightening — so often the symptoms are treated by drugs and the cause is largely or totally ignored. The public and the medical profession seem to have been unable to withstand the

pressures of drug promotion by huge money making drug concerns, and it will be surprising if in the next decade or so we are not called upon to treat diseases of the nervous system caused by the side effects of tranquillisers and sleeping pills. The thalidomide tragedy is unlikely to remain in isolation and physiotherapy in paediatrics may well face the problem of dealing with brain damaged children and congenital malformations from drug side effects — either self administered or medically prescribed. If the side effects of drugs finally cause a reverse swing of the pendulum, then physical methods of treatment are likely to be better recognized for the safe contribution they can make in certain areas, at present mistakenly treated predominantly by the prescription of placebo drugs. It is horrifying that so many Australians despite good food and climate, and the opportunity for outdoor activities, should consume and expect doctors to prescribe, drugs for so many minor and even imagined ailments.

Our status in the eyes of the medical profession and the public is also related to the educational structure of our course.

A Paramedical Division of the S.A.I.T. seems likely in the future and this in itself would raise the concept of paramedical services in medicine and the community. A degree structured intrinsically for Physiotherapy would further indicate the standard and value of this form of treatment. One hopes that doctors would be convinced of our contribution not as rivals but as a supportive medical service which offers something valuable to the recovery of their patients.

Some of the best graduates would no doubt ultimately be candidates for the award of a Fellowship of an Australian College of Physiotherapy. The preparation for the establishment of such a College has begun and this shows vision and timely recognition of the demands of the coming decades, and offers the opportunity to meet these if we care to mobilise our professional resources.

(2) *The need for a longer course and the role of hospitals in 'Continuing Education'.*

At present there is a particular need for 'Continuing Education' imposed by the fact that there is inadequate time available in the undergraduate course to educate students in all fields of physiotherapy to the standard referred to in the report. The three years and three months course is a compromise, and particular problems will arise even with this compromise.

The teaching hospitals carry a high ratio of first year graduates; it is essential that hospital authorities recognize that time and further teaching must be available in that first year to complete the training in certain sections, to enlarge on basic knowledge and give motivation for further learning. Shortage of senior staff is a more legitimate departmental excuse for failure to supply this teaching than staff shortage, but backing must come from the authorities as well.

Some teaching hospitals have failed to assume this responsibility as far as physiotherapy is concerned. The greatest educational advancement of the qualified physiotherapist has come from the professional association which has regularly given lectures, organised courses, and co-operated closely and harmoniously with the teaching department.

Authorities must realise the significance of economy of time for all concerned through effective treatments and more rapid discharges. Crippling, unrealistic patient loads cause frustration in young graduates who have to drop their standards and relinquish thoughts of keeping up-to-date.

Hospital authorities have recognized the need for in-service education of doctors. Why is there so little recog-

nition of the same need for physiotherapists? Could more in-service education be arranged regularly by those in charge of physiotherapy departments? A pattern might then be established which could be used to persuade hospital authorities to approve periodic interhospital departmental seminars and case presentations, or perhaps partly to sponsor a visiting lecturer.

Is the next step in pressing the importance of this education through superintendent physiotherapists or at a higher level? How much is being done? How can the programme be developed? What part should physiotherapy unit supervisors play in in-service education?

How can we help physiotherapists take part more effectively and confidently in interdepartmental discussions and lecture demonstrations to other medical groups?

(3) *Nature of the course.*

As has been previously stated a Degree in Physiotherapy should be structured throughout for professional requirements and should not be an offshoot of the more traditional Science Degree where there is risk of being overloaded with science subjects of peripheral value at the expense of physiotherapy subjects.

The academic body responsible for planning the new medical course curriculum has also accepted the importance of designing a course tailored to the needs of clinical medicine and which will involve the student in the clinical field earlier in the course.

(4) *Lack of avenues for educational and professional advancement.*

If the course is approved for a degree award many of the problems the profession has struggled to overcome in the past would be eased. The door would be opened wider to higher awards, post graduate studies, scholarships, research and recruitment of highly qualified staff, advancement of the profession through improved status and salaries, and reduction in the loss of trained personnel would follow.

Male and female students with good academic records would be encouraged to enter the course, opportunities would be available for the best students to progress to higher qualifications thus feeding back more senior staff into all areas of the profession. More incentive would be provided for physiotherapists to return to work part time.

At the same time there would be the added risk of recruitment of a greater number of people motivated by material gain; this could overshadow the motive of altruism characteristic of the profession in the past.

(5) *Dangers of overspecialization.*

"Topic" teaching is one way of reducing the risk of overspecialization. For some time we have been gradually introducing topic teaching and the four year course put forward in 1965 was constructed in this manner. This type of programme integrates the teaching of one topic from different aspects simultaneously; for example, the medical and surgical treatment of joint conditions should be taught in conjunction with the appropriate pathology and radiology, and be related to structure and function.

It is interesting to note that the new curriculum for medical students at The University of Adelaide commencing later this year, is designed to introduce a great deal more topic teaching, and to give medical students much more clinical training in hospitals during the course. This should, amongst other desirable effects, reduce the tendency to produce too many doctors orientated towards medical science specialization and too few good clinicians.

It is not easy to arrange topic teaching programmes because it requires close co-operation between all staff taking part — not only concerning the content and timing of the syllabus but also in fitting lectures into the timetable at times suitable to full and part-time staff, and students.

However the benefits of this method are considerable as the presentation teaches students to see the material in the whole context instead of in a fragmentary fashion.

The other way to guard against overspecialization is by maintaining a balance between "generalists" and "specialists".

It seems clear that we must have both these categories of physiotherapists teaching students, and the "generalists" must be physiotherapists of high academic and clinical calibre who have specialized knowledge and clinical experience in a number of fields; they should not be people with a little knowledge of a number of specialist fields.

The profession has arrived at the point where it requires not only good specialists who can advance knowledge and treatment in a particular field but also "specialized generalists" who can see the whole spectrum of physical treatments and the relationship of these to each other, who can quickly and effectively examine and determine overall treatment in logical sequence, who can apply all physical modalities skilfully and who can speak to medical colleagues with the authority of sound academic knowledge and clinical experience.

In the education of our students we have, and value, the contributions of both these types of physiotherapists and it would be a great mistake if we did not heed what has happened to "the whole" in some medical courses where the students have been exposed to many teachers, each one dedicated to his own specialty, and inevitably losing sight of the relative importance of this specialty to the course as a whole.

(6) *Shortage of physiotherapists.*

How can we provide sufficient physiotherapists for community needs?

To increase the existing quota of thirty students annually requires finance for more staff, equipment, maintenance, and increased clinical facilities at some teaching hospitals. If these problems are solved we could progressively increase the intake to approximately 60, provided we could send 15 to 20 students to the proposed South Western Districts Hospital for clinical teaching and practice.

However with current losses from the profession such an intake would probably still be inadequate by 1990.

What are the alternatives? To further increase numbers would necessitate considerable de-centralisation of the course which in turn would make it difficult to administer the teaching department effectively, and to preserve time to keep in close touch with staff and students. Is this personal contact and interest important?

"Sandwich" courses are used in some Universities and Colleges of Advanced Education. They may take the form of block periods of concentrated academic teaching alternating with three or more months in industry, and may utilize three terms or two semesters each year and a shorter long vacation. These courses will soon be examined more closely in South Australia as a possible way of relating academic knowledge with professional practice during the course, and allowing better use to be made of staff and physical facilities. Would a longer academic year with two semesters and two large groups of students alternating between the S.A.I.T. and the hospitals within each term, enable us to maintain the present standards of personal involvement and tuition of students in the physiotherapy course?

It seems that this type of course would only be of value where practical work in the field only occurs during long vacations. The present physiotherapy course would seem to have little need for this type of course arrangement since so much of the teaching is conducted in the clinical

setting. From the beginning of second year teaching is divided so that some takes place in the non-clinical situation and some in the clinical situation. This enables students to apply their knowledge to the professional field automatically, and enables staff to keep up to date and extend their professional knowledge and clinical experience side by side with physiotherapists not engaged in teaching undergraduates. This is of mutual benefit to both parties and contrasts sharply with the pattern of some American courses where candidates can pass the examinations for a Degree in Physical Therapy before they have ever put this knowledge into practice on patients.

CONCLUSION

It would appear that the developments which have taken place in the physiotherapy course are in parallel with emerging trends in medical education in South Australia; we must continue to move forward in a manner which will meet the requirements of medicine with which we are so interrelated. At the same time we must bear in mind the pattern recommended for the development of professional courses in Colleges of Advanced Education.

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